Health disparities in substance use among Pennsylvania adults

State Epidemiological Outcomes Workgroup, 2020

RECOMMENDATIONS

As demonstrated by self-reported survey data from Pennsylvania adults, substance use prevalence varies by gender, sexual identity, race, and ethnicity. While similar trends can be seen in the data for substance use treatment, overdose treatment and deaths, missing data for important demographic characteristics such as race and ethnicity can make it difficult to interpret findings to inform programming and policy. In order to ensure more equitable outcomes for preventing and treating substance use disorders, we must continue to improve our surveillance systems by consistently collecting race and ethnicity data for all people receiving treatment at hospitals and substance use facilities. This includes engaging with treatment providers to address issues with data quality, including obstacles in data collection and reporting.

BACKGROUND

Health disparities in substance use among youth persist into adulthood, leading to differences in treatment for substance use and overdose within racial, ethnic, gender, and sexual minorities in Pennsylvania (PA).

Data on substance use trends in adults (18 years of age and older) are available through surveys, substance use treatment facilities, hospitals, and vital statistics. Using data from Pennsylvania residents who participated in the National Survey on Drug use and Health (NSDUH), this data brief identifies disparities in substance use by gender, sexual identity, race, and ethnicity.

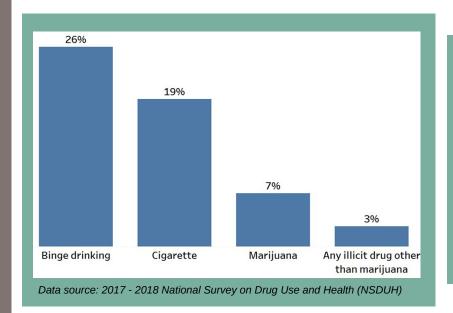


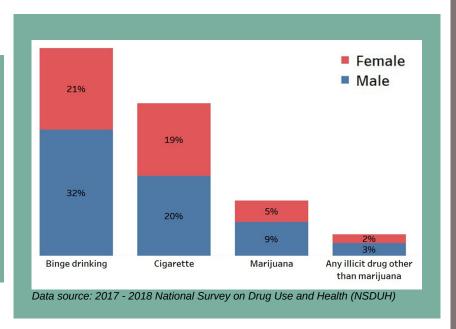
Figure 1: Past month substance use in PA adults (NSDUH)

Between 2017 and 2018, over one in four adults in Pennsylvania reported binge drinking and one in five adults reported cigarette use in the past month (Figure 1). Marijuana use was reported by 7% of adults, while only 3% reported illicit substance use other than marijuana [1].

Substance use differs by gender

Figure 2: Past month substance use in PA adults by gender (NSDUH)

Between 2017 and 2018, substance use varied by gender, with more adult males reporting binge drinking (32%) and marijuana use in the past month (9%) compared to females (21% and 5% respectively) [1].



Substance use differs by race, ethnicity, and sexual identity

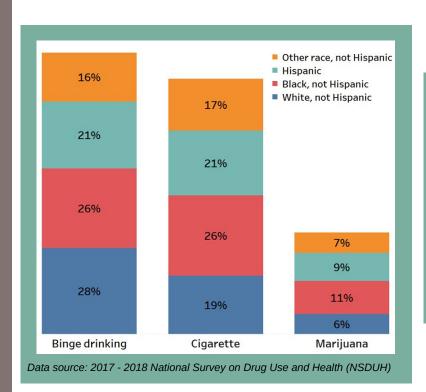


Figure 3: Past month substance use in PA adults by race and ethnicity (NSDUH)

Between 2017 and 2018, reported binge drinking in the past 30 days was highest among White, non-Hispanic adults (28%) and Black, non-Hispanic adults (26%). During this same period, cigarette use in the past 30 days was highest among Black, non-Hispanic adults (26%) and Hispanic adults (21%) [1].

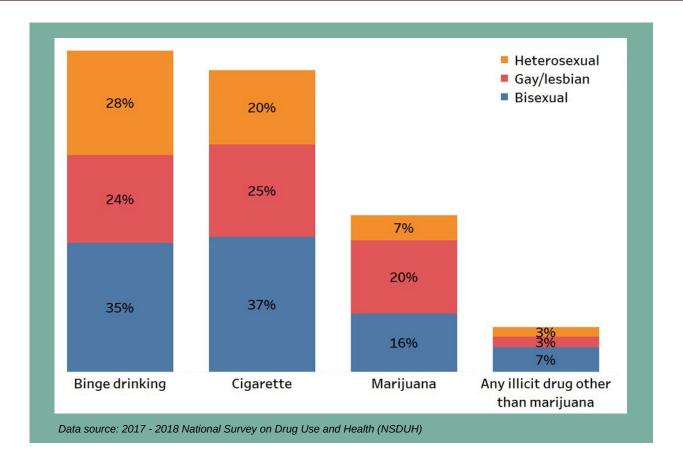
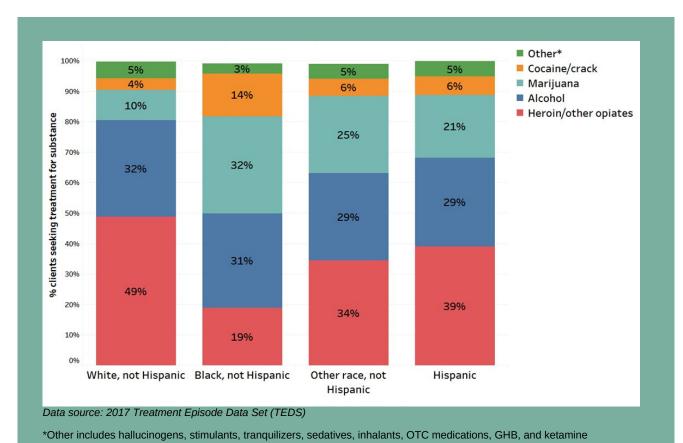


Figure 4: Past month substance use in PA adults by sexual identity (NSDUH)

Between 2017 and 2018, adults who identified as bisexual had a higher prevalence of binge drinking (35%) and cigarette use (37%) in the past month compared to adults who identified as gay or lesbian or adults who identified as heterosexual (Figure 4). Over twice as many adults who identified as sexual minorities reported using marijuana in the past month (16% bisexual, 20% gay or lesbian) compared to adults who identified as heterosexual (7%). Use of other illicit substances was highest in adults who identified as bisexual (7%) compared to adults who identified as heterosexual (3%) and adults who identified as gay or lesbian (3%) [1].

Substance use treatment varies by race and ethnicity

In addition to survey data, treatment episode data (TEDS) from substance use treatment facilities in Pennsylvania can be used to identify differences in treatment completion and primary substance used at admission. It is important to note that there is no requirement to report data to TEDS for individuals receiving private insurance or Medicaid and therefore these data may not include information on clients whose treatment services were paid for by these sources, providing an incomplete picture of treatment services in Pennsylvania.



**25% of admissions are missing race and/or ethnicity

Figure 5: Primary substance used at admission to substance use treatment facilities in PA by race and ethnicity** (TEDS)

In 2017, the primary substance used at admission to a substance use treatment facility in Pennsylvania varied by race and ethnicity (Figure 5). Nearly half (49%) of White, non-Hispanic clients reported primarily using heroin or other opiates upon admission, whereas more Black, non-Hispanic clients were using marijuana (32%). The primary substance used at admission for other races and Hispanic clients was most often heroin or other opiates (34% and 39%, respectively). Alcohol use upon admission was relatively consistent across all race/ethnicities, ranging from 29% - 31% [2].

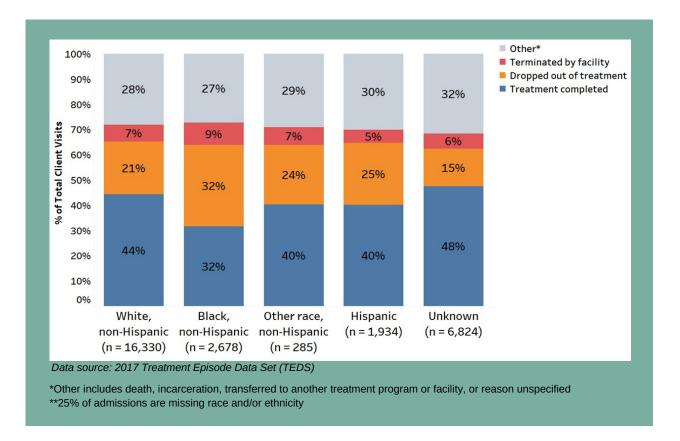


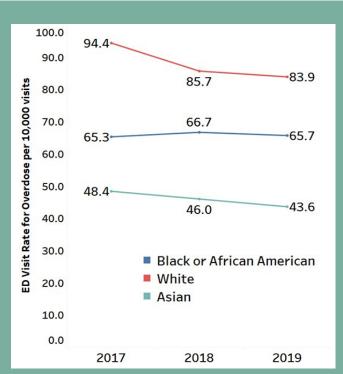
Figure 6: Substance use treatment discharge status in PA facilities by race and ethnicity** (TEDS)

Using 2017 Treatment Episode Data (TEDS), a higher percentage of non-Hispanic Black patients (32%) dropped out of treatment compared to non-Hispanic White (21%) or Hispanic (25%) patients. A slightly higher percentage of non-Hispanic Black patients (9%) were asked to leave the facility compared to non-Hispanic White (7%) and Hispanic (5%) patients [2]. This is not the full picture, however, as a sizable amount of patients' race and/or ethnicity data are missing in each category. In total, one quarter (25%) of the records in this data set, or 6,284 patients, were missing either race or ethnicity information for the clients.

Drug overdoses differ by race and ethnicity

Data from emergency department visits and vital statistics can be used to investigate disparities in overdose from opioids and other substances. Similar to differences in reported substance use and substance use treatment, differences in overdose treatment and mortality were seen among racial and ethnic groups.

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These data were obtained from the Pennsylvania Department of Health. The Pennsylvania Department of Health specifically disclaims all responsibility for any analyses, interpretations, or conclusions.

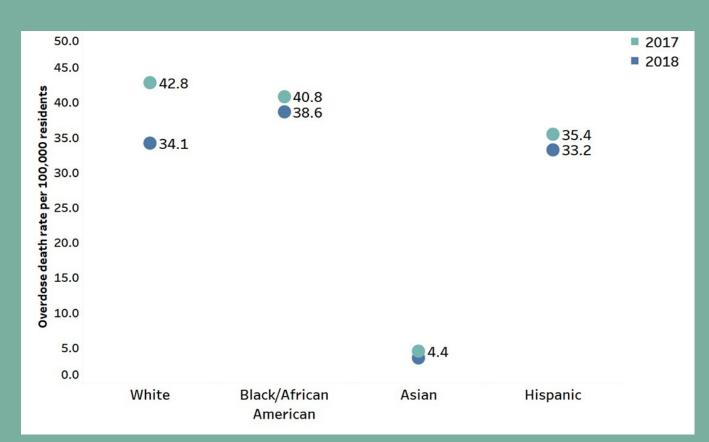
Figure 7: Emergency Department visits for drug overdose (PA DOH)

Figure 7 shows trends in Emergency
Department (ED) visits for overdose from
2017 to 2019 by race. Data suggest that
non-fatal overdose rates among White and
Asian populations have decreased, whereas
non-fatal overdose rates among Black or
African American populations have
remained relatively consistent [3].

Table 1 - Emergency Department data completeness for race and ethnicity by year (PA DOH)

Trends involving race and ethnicity data from Emergency Departments (e.g. syndromic surveillance data) should be interpreted with caution due to a significant proportion of records missing data on this demographic. As seen in Table 1, in 2017 over half (52%) of ED visits for overdose were missing race and most were missing ethnicity data (88%). While the completeness of race and ethnicity data in ED records has improved over time, over one third (35%) were still missing race in 2019 and 42% were missing ethnicity [3].

Year	Race	Ethnicity
2017	52%	88%
2018	47%	53%
2019	35%	42%



^{*34} deaths with unknown race in 2017, 23 deaths with unknown race in 2018.

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Figure 8: Overdose death rates by race and ethnicity* in Pennsylvania, 2017 & 2018 (PA DOH)

Among Whites, the overdose death rate declined from 2017 to 2018 from 42.8 to 34.1 per 100,000 residents (Figure 8). In 2017, the highest overdose death rate was among Whites, whereas in 2018 the highest overdose death rate was among Blacks (38.6 deaths per 100,000 residents) [4]. From 2017 to 2018, the overdose death rate dropped among Hispanic populations from 35.4 per 100,000 residents to 33.2 per 100,000 residents [4].

^{*61} deaths with unknown ethnicity in 2017, 31 deaths with unknown ethnicity in 2018.

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REFERENCES

- **1.** U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Behavioral Health Statistics and Quality. (2018). National Survey on Drug Use and Health (NSDUH 2-year RDAS 2017 2018). Retrieved from https://datafiles.samhsa.gov/
- 2. U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration, Center for Behavioral Health Statistics and Quality. (2018). Treatment Episode Dataset (TEDS-D). Retrieved from https://datafiles.samhsa.gov/
- **3.** Pennsylvania Department of Health, Emergency Department Visits for Drug Overdose. Unpublished data.
- 4. Pennsylvania Department of Health, Overdose Death Rates. Unpublished data.

PENNSYLVANIA SEOW

The State Epidemiological Outcomes Workgroup (SEOW) is supported by the Pennsylvania Department of Drug and Alcohol Programs. SEOW members represent both governmental and non-governmental agencies from across Pennsylvania. The goal of the SEOW is to inform and enhance state and community decisions regarding substance misuse and mental illness prevention programs, practices, and policies.

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*Information contained in this report does not necessarily reflect the views of individual SEOW members or their respective agencies.